

Amendments to the Claims:

Claims 1 – 7 are original. Claims 8 – 14 are new. No new matter is introduced by these amendments. Consideration of all amendments is respectfully requested.

5 Listing of Claims:

Claim 1 (currently amended): A method for handling an interrupt request in an optical storage drive when the optical storage drive executes a control procedure or operation, the method comprising:

10 circuit after execution of the control procedure or operation has begun;
 checking whether the interrupt request is a read command;
[[if]] when the interrupt request is a read command, checking whether data
 indicated by the read command is stored in a buffer; and
[[if]] when the indicated data is stored in the buffer, transferring the
15 corresponding data to the control circuit from the buffer to respond to the
 interrupt request in parallel with the execution of the control procedure or
 operation.

Claim 2 (original): The method of claim 1, wherein the buffer is a volatile memory of the optical storage drive.

Claim 3 (original): The method of claim 1, wherein the buffer is a register of the optical storage drive.

25 Claim 4 (original): The method of claim 1, wherein the control circuit is a host computer.

Claim 5 (original): The method of claim 1, further comprising:

if the data indicated by the read command is not stored in the buffer, suspending handling the interrupt request.

Claim 6 (currently amended): A storage medium for storing program code used to control

5 an optical storage drive to perform the following steps while executing a control procedure or operation:

receiving an interrupt request from a control circuit;

checking whether the interrupt request is a read command;

10 [[if]] when the interrupt request is a read command, checking whether data indicated by the read command is stored in a buffer; and

[[if]] when the indicated data is stored in the buffer, transferring the

corresponding data to the control circuit from the buffer to respond to the interrupt request in parallel with the execution of the control procedure or operation.

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Claim 7 (original): The storage medium of claim 6 being a non-volatile memory.

Claim 8 (new): A method for handling an interrupt request in an optical storage drive

20 when the optical storage drive executes a control procedure or operation, the method comprising:

providing a control circuit comprising a first control circuit and a second control circuit;

utilizing the optical storage drive to control the first control circuit to perform a seeking operation;

25 receiving an interrupt request;

checking whether the interrupt request is a read command;

when the interrupt request is a read command, checking whether data indicated by the read command is stored in a buffer; and

when the indicated data is stored in the buffer, utilizing the second control circuit to transfer the corresponding data from the buffer to respond to the interrupt request in parallel with the first control circuit executing the control procedure or operation.

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Claim 9 (new): The method of claim 1, wherein the buffer is a volatile memory of the optical storage drive.

10 Claim 10 (new): The method of claim 1, wherein the buffer is a register of the optical storage drive.

Claim 11 (new): The method of claim 1, wherein the control circuit is a host computer.

15 Claim 12 (new): The method of claim 1, further comprising:
if the data indicated by the read command is not stored in the buffer,
suspending handling the interrupt request.

20 Claim 13 (new): A storage medium for storing program code used to control an optical storage drive to perform the following steps while executing a control procedure or operation:
receiving an interrupt request from a control circuit, the control circuit comprising a first control circuit and a second control circuit;
25 checking whether the interrupt request is a read command;
when the interrupt request is a read command, checking whether data indicated by the read command is stored in a buffer; and
when the indicated data is stored in the buffer, utilizing the second control circuit to transfer the corresponding data to the control circuit from the buffer to respond to the interrupt request;

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wherein the control procedure or operation is executed by the first control circuit, and the second control circuit transfers the data in parallel with the execution of the control procedure or operation.

- 5 Claim 14 (new): The storage medium of claim 6 being a non-volatile memory.